AMENDMENTS TO THE CLAIMS

Please amend claims 15, 33, and 35 as indicated below.

1. (original) A micro-optic system comprising:
a first collimating means for introducing a first input ordinary beam with wavelength λ_{1o} of a first pair of input beams,
a second collimating means for introducing a first input extraordinary beam with wavelength λ_{1e} of said first pair of input beams,
a third collimating means for introducing a second input ordinary beam with wavelength λ_{2o} of a second pair of input beams,
a fourth collimating means for introducing a second input extraordinary beam with wavelength λ_{2e} of said second pair of input beams,
a polarization beam combiner for combining said first pair of input beams and said second pair of input beams into a first combined light beam with wavelength λ_1 and a second combined light beam with wavelength λ_2, and
a filter for multiplexing said first combined light beam and said second combined light beam into an output beam,
wherein said wavelength λ_1 equals to said wavelength λ_{1o} and said wavelength λ_{1e}, said wavelength λ_2 equals to said wavelength λ_{2o} and said wavelength λ_{2e}.

2 - 8. (withdrawn)

9. (original) The micro-optic system of claim 1, wherein said polarization beam combiner comprises a prism selected from the group consisting of Glan polarizing prism, right angle prism coated with thin film, Nicol prism, Wollaston prism, Rochon prism and Sénarmont prism.

10 – 14. (withdrawn)

15. (currently amended) A micro-optic system comprising:
~~a fifth~~ an input beam collimating means for introducing an input beam with wavelength λ_1 and wavelength λ_2,
a filter for de-multiplexing said input beam into a first de-multiplexed light beam with wavelength λ_1 and a second de-multiplexed light beam with wavelength λ_2, and
a polarization beam splitter for splitting said first de-multiplexed light beam and said second de-multiplexed light beam into a first pair of output beams comprising a first output ordinary beam with wavelength λ_{1o} and a first output extraordinary beam with wavelength λ_{1e} and a second pair of output beams comprising a second output ordinary beam with wavelength λ_{2o} and a second output extraordinary beams with wavelength λ_{2e},

wherein said wavelength λ_1 equals to said wavelength λ_{1o} and said wavelength λ_{1e}, said wavelength λ_2 equals to said wavelength λ_{2o} and said wavelength λ_{2e}.

16 – 21. (withdrawn)

22. (original) The micro-optic system of claim 15, wherein said polarization beam splitter comprises a prism selected from the group consisting of Glan polarizing prism, right angle prism coated with thin film, Nicol prism, Wollaston prism, Rochon prism and Sénarmont prism.

23 – 26 (withdrawn)

27. (original) A micro-optic system comprising:
a first collimating means for introducing a first input ordinary beam with wavelength λ_{1o} of a first pair of input beams,
a second collimating means for introducing a first input extraordinary beam with wavelength λ_{1e} of said first pair of input beams,
a third collimating means for introducing a second input ordinary beam with wavelength λ_{2o} of a second pair of input beams,
a fourth collimating means for introducing a second input extraordinary beam with wavelength λ_{2e} of said second pair of input beams,
a polarizing prism having a first half with a first external surface and a second external surface, and a second half with a third external surface opposing to said second external surface and a fourth external surface opposing to said first external surface, the centers of said second external surface and said third external surface defining an optical axis, said first half combining said first pair of input beams which are incident on said first external surface into a first combined light beam with wavelength λ_1, said second half combining said second pair of input beams which are incident on said third external surface into a second combined light beam with wavelength λ_2, and
a filter disposed between said first half and said second half, said filter reflecting said first combined light beam and being transparent to said second combined light beam, thereby multiplexing said first combined light beam and said second combined light beam into an output beam along said optical axis,
wherein said wavelength λ_1 equals to said wavelength λ_{1o} and said wavelength λ_{1e}, said wavelength λ_2 equals to said wavelength λ_{2o} and said wavelength λ_{2e}.

28. (original) The micro-optic system of claim 27, further comprising a fifth collimating means for receiving said output beam.

29. (original) The micro-optic system of claim 28, further comprising:
a first subassembly holding an end of a first fiber in paraxial relationship with said first collimating means,

a second subassembly holding an end of a second fiber in paraxial relationship with said second collimating means,

a third subassembly holding an end of a third fiber in paraxial relationship with said third collimating means,

a fourth subassembly holding an end of a fourth fiber in paraxial relationship with said fourth collimating means, and

a fifth subassembly holding an end of a fifth fiber in paraxial relationship with said fifth collimating means,

wherein said first fiber, said second fiber, said third fiber and said fourth fiber are polarization-maintaining optical fibers, said fifth fiber is a single mode optical fiber.

30. (original) The micro-optic system of claim 28, wherein said first collimating means, said second collimating means, said third collimating means, said fourth collimating means and said fifth collimating means each comprises a lens selected from a group consisting of GRIN lens, spherical lens and aspherical lens.

31. (original) The micro-optic system of claim 27, wherein said polarizing prism comprises a prism selected from the group consisting of Nicol prism, Rochon prism and Sénarmont prism.

32. (original) The micro-optic system of claim 27, wherein said filter comprises a device selected from a group consisting of grating and thin film.

33. (currently amended) A micro-optic system comprising:

~~a fifth~~ an input beam collimating means for introducing an input beam with wavelength λ_1 and wavelength λ_2,

a polarizing prism having a first half with a first external surface and a second external surface, and a second half with a third external surface opposing to said second external surface and a fourth external surface opposing to said first external surface, the centers of said second external surface and said third external surface defining an optical axis, and

a filter disposed between said first half and said second half, said filter reflecting the portion of light beam with wavelength λ_1 of said input beam and being transparent to the portion of light beam with wavelength λ_2 of said input beam, thereby said filter de-multiplexing said input light beam which is incident along said optical axis on said second external surface into a first de-multiplexed light beam with wavelength λ_1 and a second de-multiplexed light beam wavelength λ_2, said first half splitting said first de-multiplexed light beam into a first pair of output beams comprising a first output ordinary beam with wavelength λ_{1o} and a first output extraordinary beam with wavelength λ_{1e}, said second half splitting said second de-multiplexed light beam into a second pair of output beams comprising a second output ordinary beam with wavelength λ_{2o} and a second output extraordinary beams with wavelength λ_{2e},

wherein said wavelength λ_1 equals to said wavelength λ_{1o} and said wavelength λ_{1e}, said wavelength λ_2 equals to said wavelength λ_{2o} and said wavelength λ_{2e}.

34. (original) The micro-optic system of claim 33, further comprising:
a first collimating means for receiving said first output ordinary beam,
a second collimating means for receiving said first output extraordinary beam,
a third collimating means for receiving said second output ordinary beam,
a fourth collimating means for receiving said second output extraordinary beam.

35. (currently amended) The micro-optic system of claim 34, further comprising:
a first subassembly holding an end of a first fiber in paraxial relationship with said first collimating means,
a second subassembly holding an end of a second fiber in paraxial relationship with said second collimating means,
a third subassembly holding an end of a third fiber in paraxial relationship with said third collimating means,
a fourth subassembly holding an end of a fourth fiber in paraxial relationship with said fourth collimating means, and
a fifth subassembly holding an end of a fifth fiber in paraxial relationship with said ~~fifth~~ input beam collimating means,
wherein said fifth fiber is a single mode optical fiber.

36. (original) The micro-optic system of claim 35, wherein each of said first fiber, said second fiber, said third fiber, and said fourth fiber comprises an optical fiber selected from a group consisting of polarization maintaining optical fiber and single mode optical fiber.

37-51 (withdrawn)